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NATIONAL BUREAU OF STANDARDS • A. V. Astin, *Director*

Radio Propagation

SECTION D

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Papers 66D1–168 to 66D6–236

Corrections to be noted in Volume 66 of the JOURNAL OF RESEARCH of the National Bureau of Standards—D. Radio Propagation

Page	Column	Line	Now reads in part	Should read
8	1	eq. 12	$\dfrac{\left[1-\left(\dfrac{\cos\theta_1}{\cos\theta_2}\right)^2\right]+\sin^2\theta_1\left[1-\left(\dfrac{k_1\cos\theta_1}{k_2\cos\theta_2}\right)^2\right]^2}{\left[1-\left(\dfrac{\cos\theta_1}{\cos\theta_2}\right)^2\right]-\sin^2\theta_1\left[1+\left(\dfrac{k_1\cos\theta_1}{k_2\cos\theta_2}\right)^2\right]^2}$.	$\dfrac{\left[1-\left(\dfrac{\cos\theta_1}{\cos\theta_2}\right)^2\right]+\sin^2\theta_1\left[1-\left(\dfrac{k_1\cos\theta_1}{k_2\cos\theta_2}\right)^2\right]^2}{\left[1+\left(\dfrac{\cos\theta_1}{\cos\theta_2}\right)^2\right]-\sin^2\theta_1\left[1-\left(\dfrac{k_1\cos\theta_1}{k_2\cos\theta_2}\right)^2\right]^2}$.
11	2	17	$Z_{ea}=dZ_i=-$	$Z_{ea}=dZ_i-$
		21	$-\dfrac{i\omega\mu d}{2\pi}\dfrac{d}{2\pi a}$	$-\dfrac{i\omega\mu d}{2\pi}\ln\dfrac{d}{2\pi a}$
16	2	eq. 8	$+\dfrac{I_\delta(z_1)I_1(z_1)}{1-I_1(2z_1)}$	$+\dfrac{2I_\delta(z)I_1(z_1)}{1-I_1(2z_1)}$.
17	1	eq. 11	$+\dfrac{CI_\delta^2(z_1)}{1-CI_\delta(2z_1)}$.	$+\dfrac{2CI_\delta^2(z_1)}{1-CI_\delta(2z_1)}$.
	2	last	$2\pi an\times\vec{H}(a,z)$	$2\pi an\times\vec{H}(a,z)$.
18	1	first	relation of $\vec{H}$	relation of $\vec{H}$
	2	eq. 29	$\left[\log k\lvert z\rvert-i\dfrac{\pi}{2}\right.$	$\left[\log k\lvert z\rvert+i\dfrac{\pi}{2}\right.$
	2	last	$\delta\lvert z\rvert=0$	$\delta\lvert z\rvert^{-1}=0$
19	1	eq. 30	$\left[\log k\lvert z\rvert-i\dfrac{\pi}{2}-\right.$	$\left[\log k\lvert z\rvert+i\dfrac{\pi}{2}-\right.$
		eq. 31	$\left[\log k\delta-i\dfrac{\pi}{2}+\right.$	$\left[\log k\delta+i\dfrac{\pi}{2}+\right.$
		eq. 32	$I_0(0)=-\dfrac{1}{\sqrt{\dfrac{\epsilon}{\mu}}\log\Gamma ka}[1+0(1)]$.	$I_0(0)=\dfrac{-\pi}{\sqrt{\dfrac{\mu}{\epsilon}}\log\Gamma ka}[1+o(1)]$.
20	2	eq. 46	$\left[\log k\delta-i\dfrac{\pi}{2}+\right.$	$\left[\log k\delta+i\dfrac{\pi}{2}+\right.$
21	1	eq. 48	$\left[\log k\delta-i\dfrac{\pi}{2}\right.$	$\left[\log k\delta+i\dfrac{\pi}{2}\right.$
25	1	33	of X	of jX
26	2	2 from bottom	$-37\div38$ mm	$\simeq37\div38$ mm.
28	2	32	after internal reflection there	after internal reflection (and as far as the length of the internal path P_i is concerned) there
39		last	10=	$C_{10}=$
51		eq. 121	$\left(\dfrac{3}{2}\quad_1\right)^{1/3}$	$\left(\dfrac{3}{2}\Lambda_1\right)^{1/3}$
108	1	eq. 6	$\mathbf{a}=\mathbf{a}e^{-ik_0RPQ}/R_{PQ}$	$\mathbf{a}=\mathbf{a}e^{-ik_0R_{PQ}}/R_{PQ}$.
109	2	eq. 32	$\int V_3 g$	$\int_{V_3} g$
177	1	Footnote 2	4 mm nd at	4 mm and at
190		15	[Wait, 1959]	[Wait, 1958]
194		eq. 24	$\cos^{n+3}\theta P_n(0)P_{n+2}^1(\cos\theta)=$	$\cos^{n+3}\theta P_n(0)P_{n+2}(\cos\theta=$

Corrections to be noted in Volume 66 of the JOURNAL OF RESEARCH of the National Bureau of Standards—D. Radio Propagation—Continued

Page	Column	Line	Now reads in part	Should read
202		7	$\left[\frac{1}{k^2}\frac{\partial^2 A_z}{\partial z'^2}\right.$	$\left[\frac{1}{k^2}\frac{\partial^2 A_z}{\partial z'^2}\right.$
		8	$\frac{\partial^2}{\partial z'^2}$	$\frac{\partial^2}{\partial z'^2}$
		12	$\frac{\partial^2}{\partial z'^2}$	$\frac{\partial^2}{\partial z'^2}$
206	1	Last	$+\sin\theta\sin\theta_1\cos\theta_1$,	$+\sin\theta\sin\theta_1\cos\pi_1$,
207	1	3	$P^n(\cos\theta)$	$P_n^1(\cos\theta)$
	2	eq. 5	$(\cos\theta)2(r\geqq a)$	$(\cos\theta)(r\geqq a)$.
226	2	5 from bottom	Trexler, J. L.,	Trexler, J. H.,
236	1	eq. 27	$G=BK$	$G=BK\cos\theta$
273	2	Last	$K=2/\Lambda$	$K=2\pi/\Lambda$
274	1	eq. 3	$\delta p=p_0\frac{4\pi}{\lambda^2}$	$\delta p=p_0\frac{4\pi}{\Lambda^2}$
		eq. 4	$\delta p=p_0\rho^2\frac{\pi}{16}\frac{l^4}{H}$	$\delta p=p_0\rho^2\frac{\pi}{16}\frac{l^4}{H^2}$
277	1	9	$\delta N\sim 10^{-2}N$	$\delta N\sim 10^{-2}N$ unit
		27	dN	dn
		eq. 25	$d\rho=dN/2\alpha^2$	$d\rho=dn/2\alpha^2$.
		34	$\rho=\int_0^\infty\frac{dN}{2\alpha^2}e^{i2Kz}$	$\rho=\int_0^\infty\frac{dn}{2\alpha^2}e^{i2Kz}$
		2 from bottom.	$g=\delta N/e$	$g=\delta n/e$
		last	$\rho=\frac{\delta N}{e}\frac{\lambda}{\delta\pi\alpha^3}$.	$\rho=\frac{\delta n}{e}\frac{\lambda}{\delta\pi\alpha^3}$.
278	1	eq. 41	$\frac{\lambda^2}{\alpha^3 D}$,	$\frac{\lambda^3}{\alpha^3 D}$,
297	2	Table 1, col. 5, line 3.	51.7° N	71.7° N
340		5	(2 to 7) and	(2–4) and
361		10	$\left(-\frac{\pi}{2}+\epsilon\right)$	$-\left(\frac{\pi}{2}+\epsilon\right)$
488		Fig. 3	Figure 3 is upside down.	.....
535		eq. A30	F_m	f_m
537		eq. A40	$Z_t=\left[\eta_2\frac{\hat{I}'_v(\gamma_1 r)}{\hat{I}_v(\gamma_1 r)}\right]_{r=a_1}$	$Z_t=\left[\eta_2\frac{\hat{I}'_v(\gamma_2 r)}{\hat{I}_v(\gamma_1 r)}\right]_{r=a_2}$
		eqs. A42 to A47	a_2 and a_1 should be interchanged everywhere on the right-hand sides.	

Corrections to be noted in Volume 66 of the JOURNAL OF RESEARCH of the National Bureau of Standards—D. Radio Propagation—Continued

Page	Column	Line	Now reads in part	Should read
552		16	P_vP_a	$P_v<P_a$
		31	$\left[\frac{\epsilon_2}{\epsilon_1}\frac{g_2^2}{\alpha}-\frac{\epsilon_3}{\epsilon_1}g_1\right]$	$\left[\frac{\epsilon_2}{\epsilon_1}\frac{g_1^2}{\alpha}-\frac{\epsilon_3}{\epsilon_1}g_1\right]$
		32	$\left[\frac{\epsilon_2}{\epsilon_1}\frac{g_1^2}{\alpha}-\frac{\epsilon_3}{\epsilon_1}g_2\right]$	$\left[\frac{\epsilon_2}{\epsilon_1}\frac{g_2^2}{\alpha}-\frac{\epsilon_3}{\epsilon_1}g_2\right]$
561	2	eq. 60	$Y_t=\frac{2\pi 1}{\left[\int_{\theta_0}^{\pi-\theta_0}E_\theta d\theta\right]^2}$	$Y_t=\frac{2\pi i}{\left[\int_{\theta_0}^{\pi-\theta_0}E_\theta d\theta\right]^2}$
562	1	1	$P_k(\cos\theta)$	$P_k(\cos\theta_0)$
563	2	eq. 3	$e^{-2u z_0}$	$e^{-u(z+z_0)}$
564	1	eq. 6	$\Delta Z=\frac{\Delta E_z ds}{J_0}\Big]_{\substack{z\to z_0\\ \rho\to 0}}$	$\Delta Z=\frac{-\Delta E_z ds}{J_0}\Big]_{\substack{z\to z_0\\ \rho\to 0}}$
567	2	eq. 40	The factor $e^{-u(z+z_0)}$ is missing in the integrand.	
593	1	Footnote 2	Fernmeldetechnische	Fernmeldetechnisches
611	2	7	idential dipole	magnetic dipole
632		eq. 79	$N=$	$n=$
Vol. 66D5	Back cover	13	Enchancement	Enhancement
666		eq. 8	$]$	$]^{1/2}$,
		eq. 10	$=(1_{z'}\mp i1_{y'}k_i$	$=(1_{z'}\mp i1_{y'})k_i$
669		eq. 19	$ik_1^2\cos\psi_1^2\ ik_2^2\cos\psi_2\ ik_3^2\cos\psi_3\ ik_4^2\cos\psi_4$	$ik_1^2\cos^2\psi_1\ \ ik_2^2\cos^2\psi_2\ \ -ik_3^2\cos^2\psi_3\ \ -ik_4^2\cos^2\psi_4$
681	Abstract	12	occurrence of fadeout	occurrence of fadeouts
689	1	30	10-db fadeout	10-db fadeouts
725	2	5	$A=A_0e^{\gamma x}$,	$A=A_0e^{\gamma r}$,
732	1	20	from (2)	from (3)

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